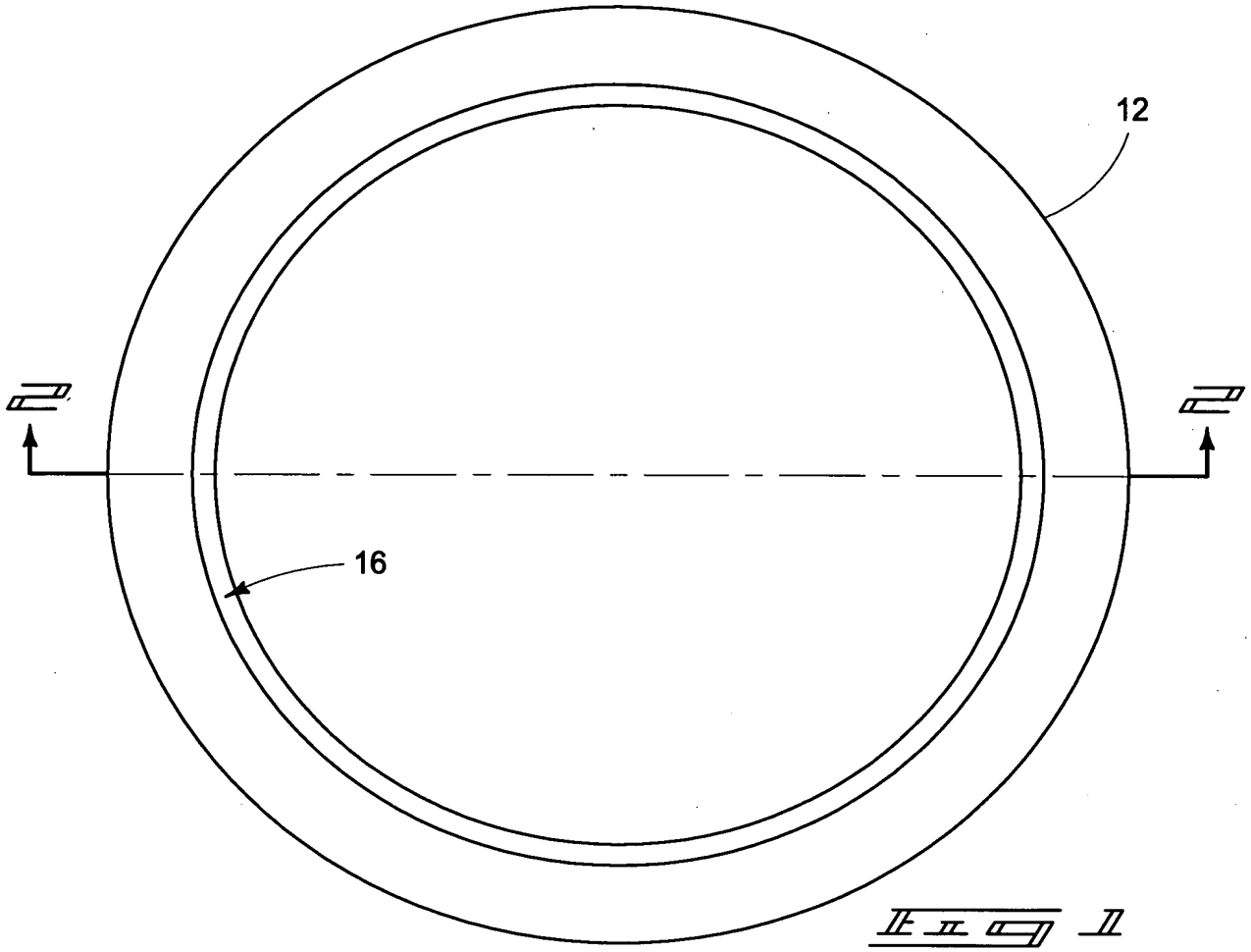



FIG 1
PRIOR ART

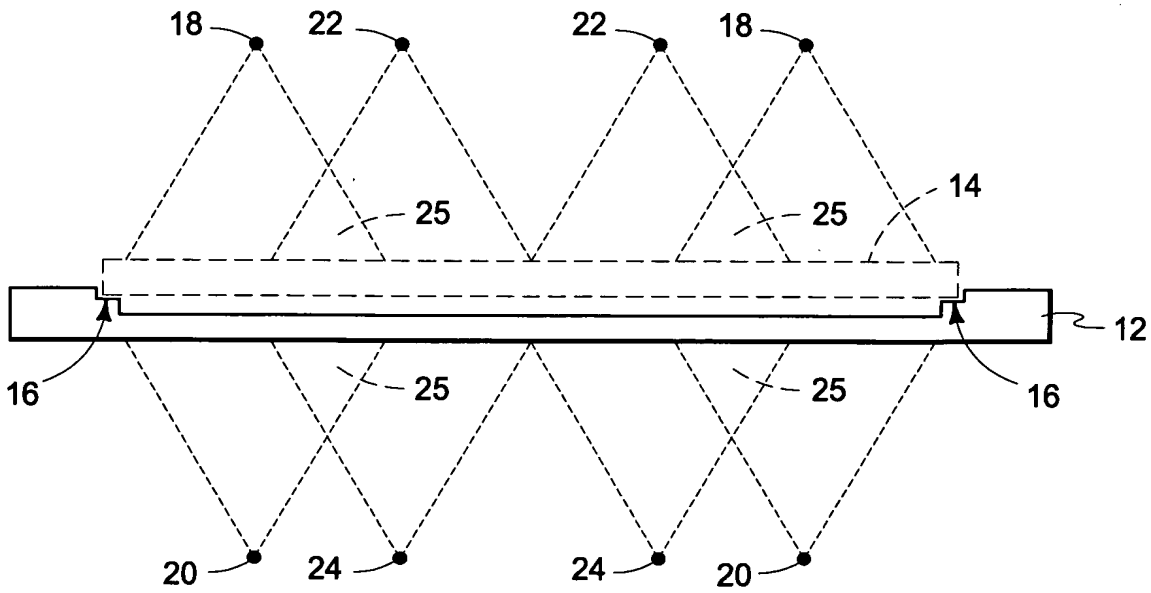



FIG 2
PRIOR ART

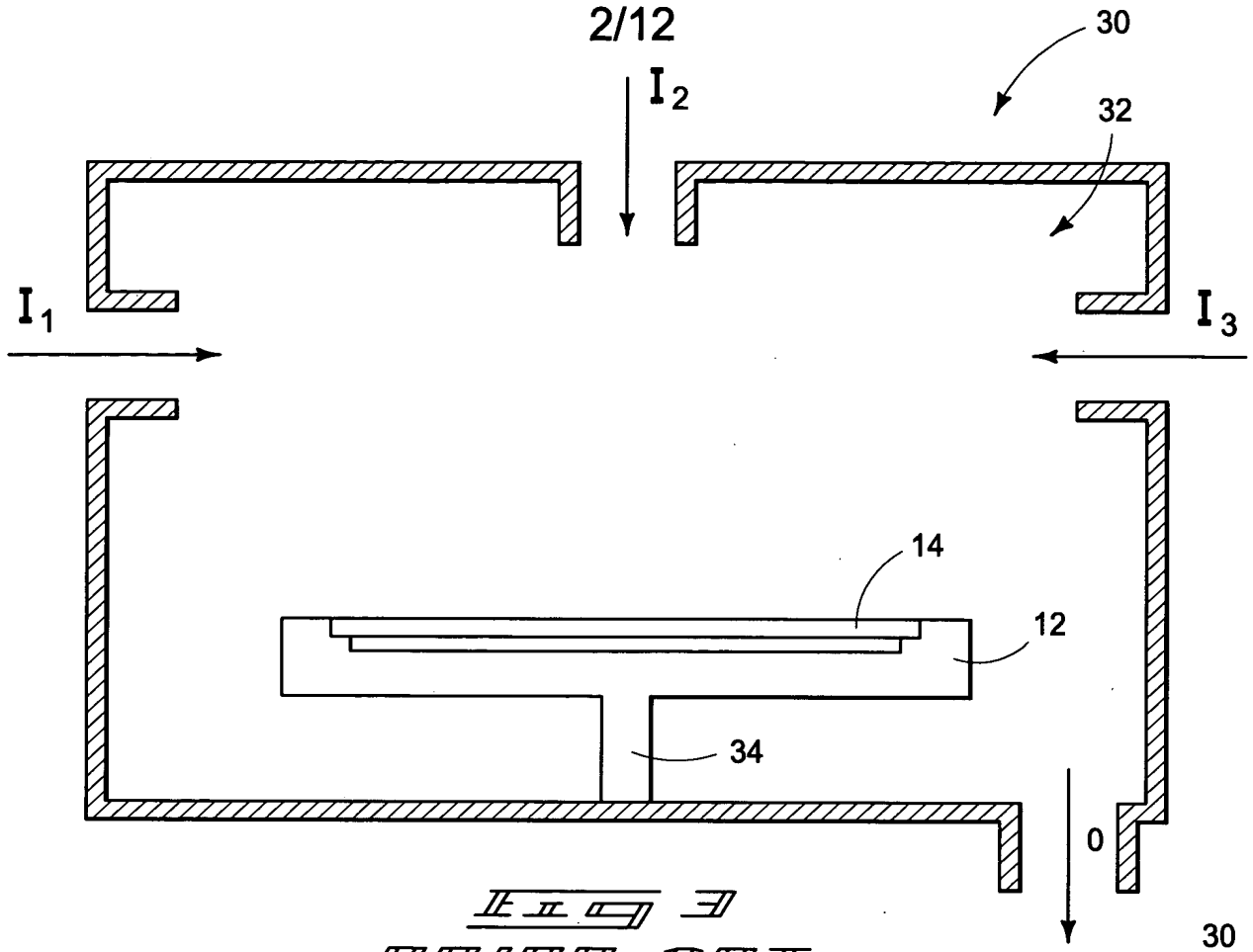



Fig 3
PRIOR ART

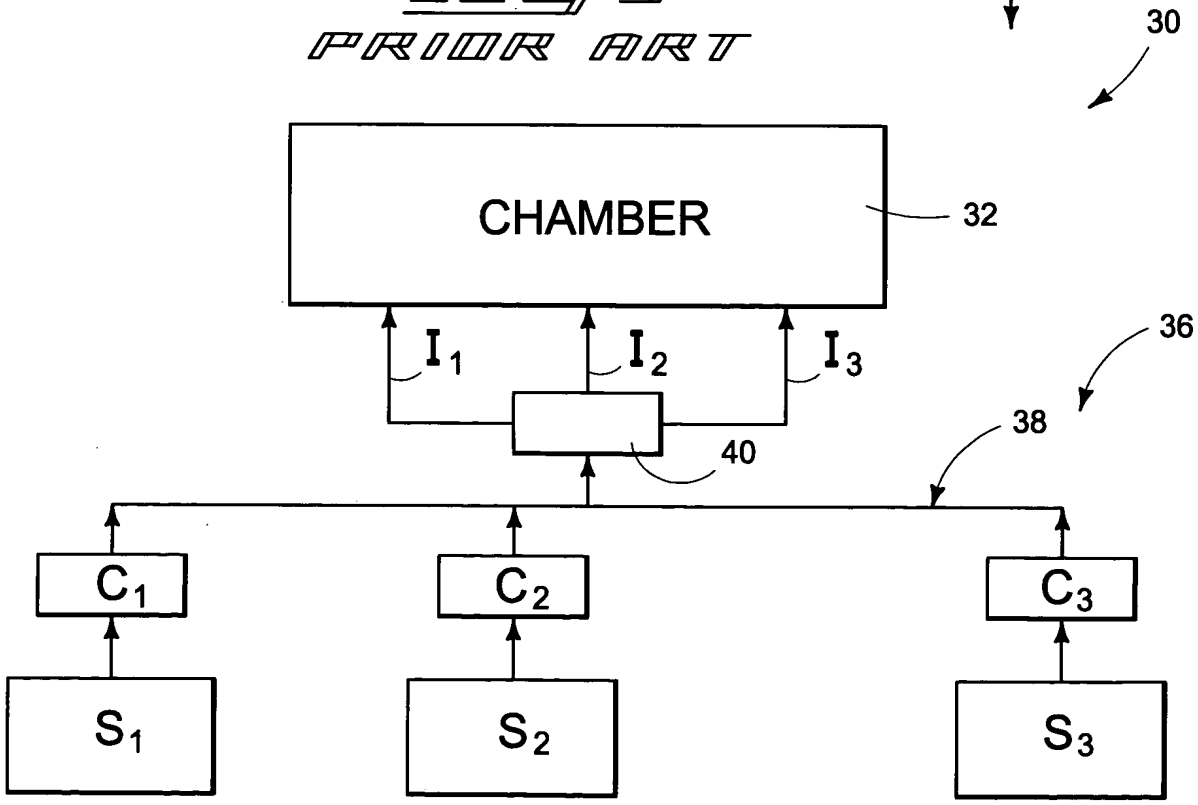



Fig 4
PRIOR ART

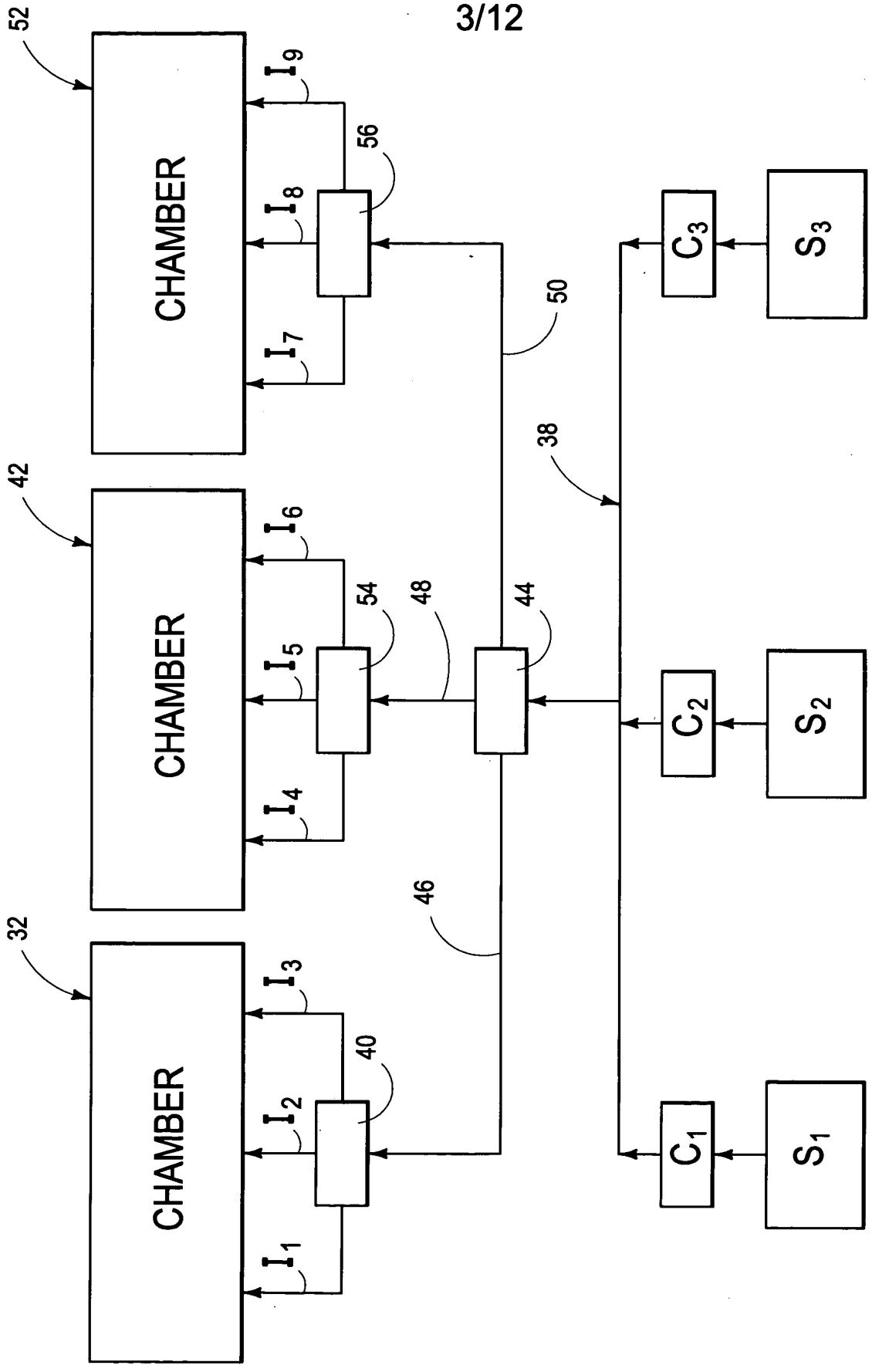
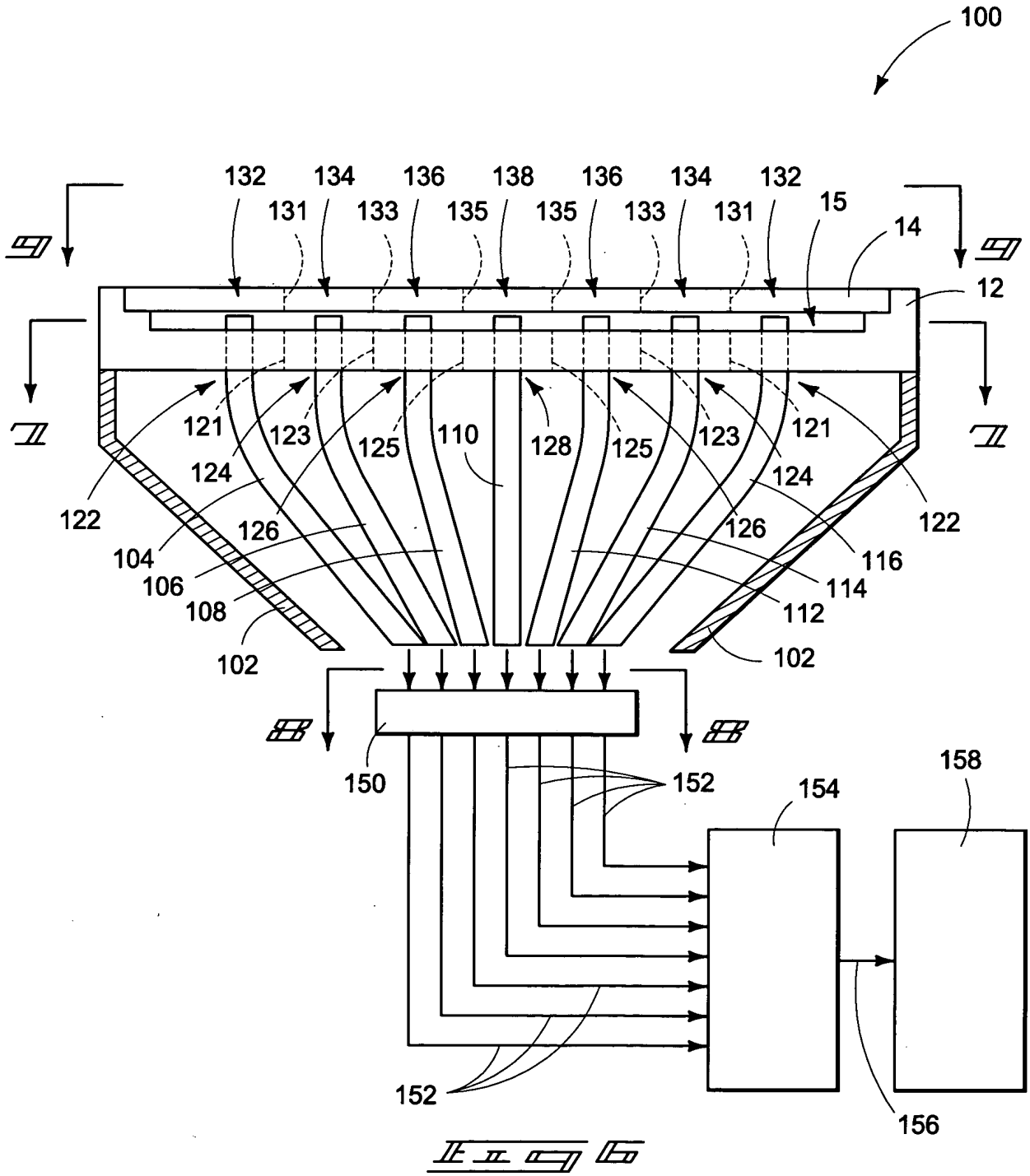



FIG 5
PRIOR ART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131
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133
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14
12
II
II
III
III
121
123
125
110
128
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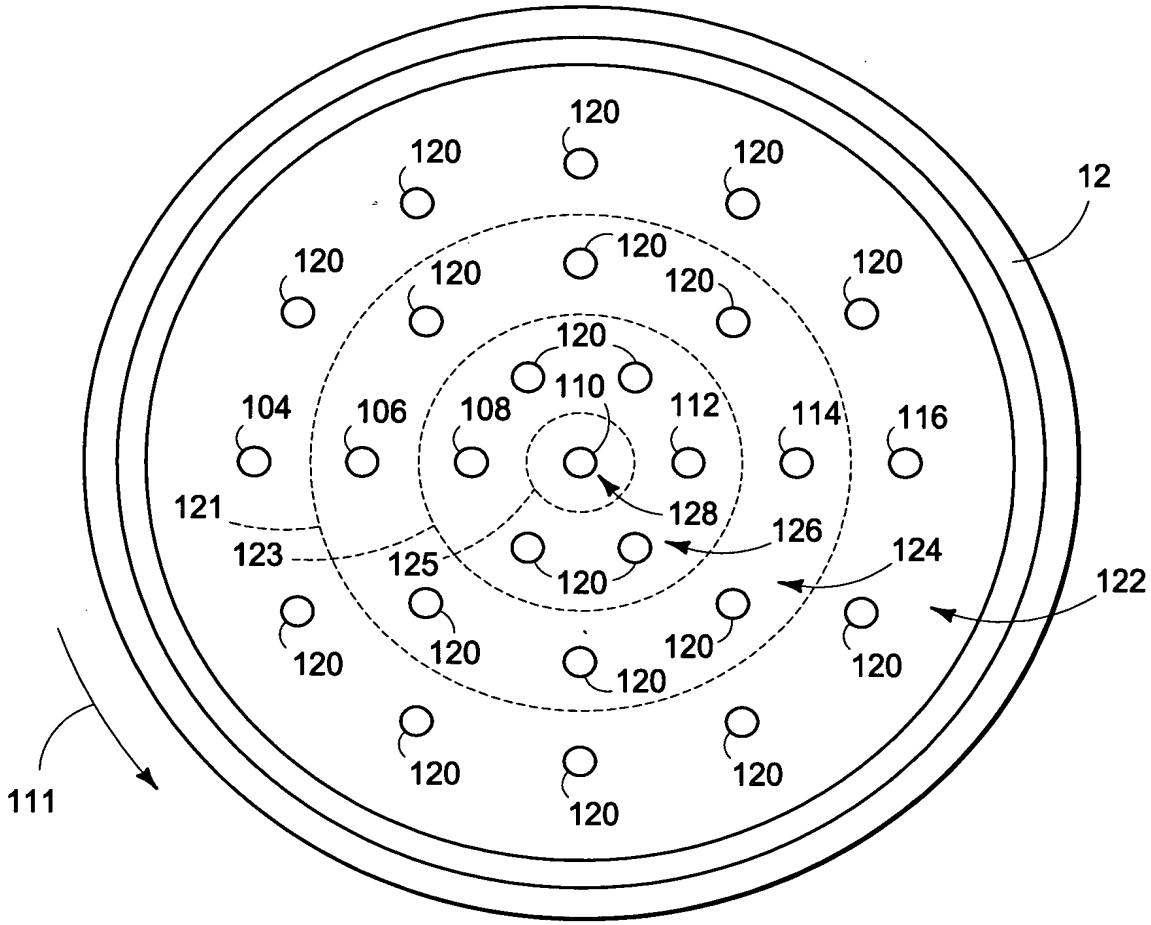
152
156

Fig 6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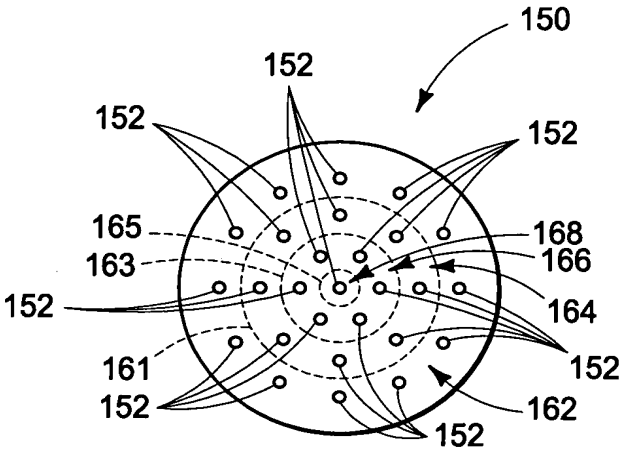
111

Fig 7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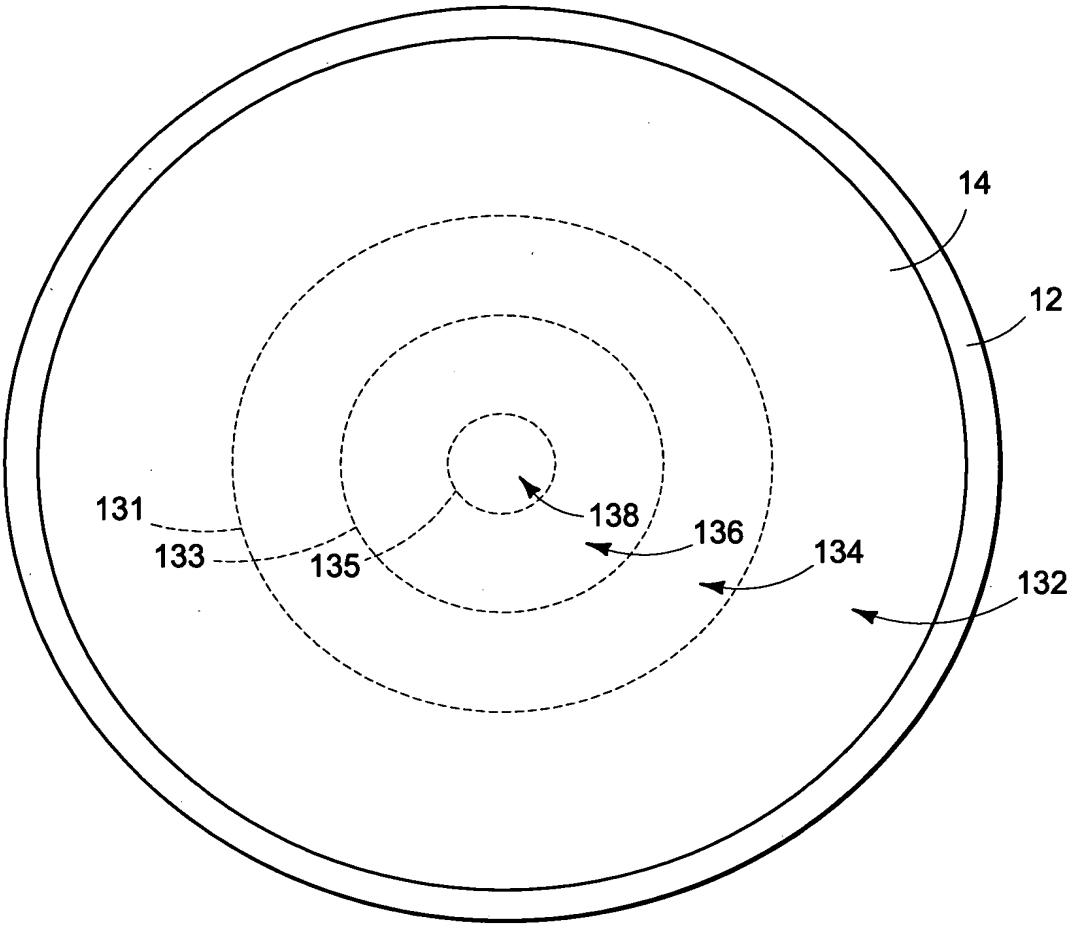
162

Fig 8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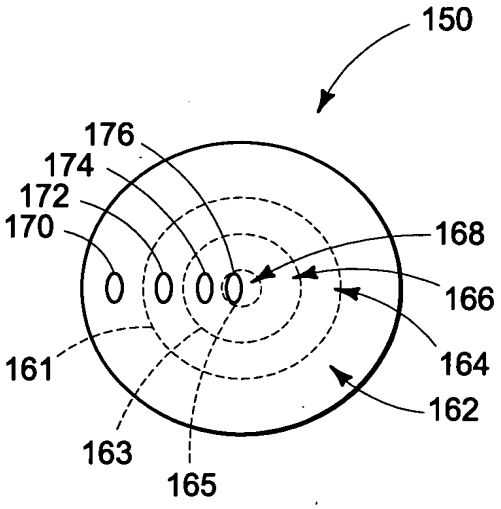
134
132

Fig 9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161
163
165

Fig 10

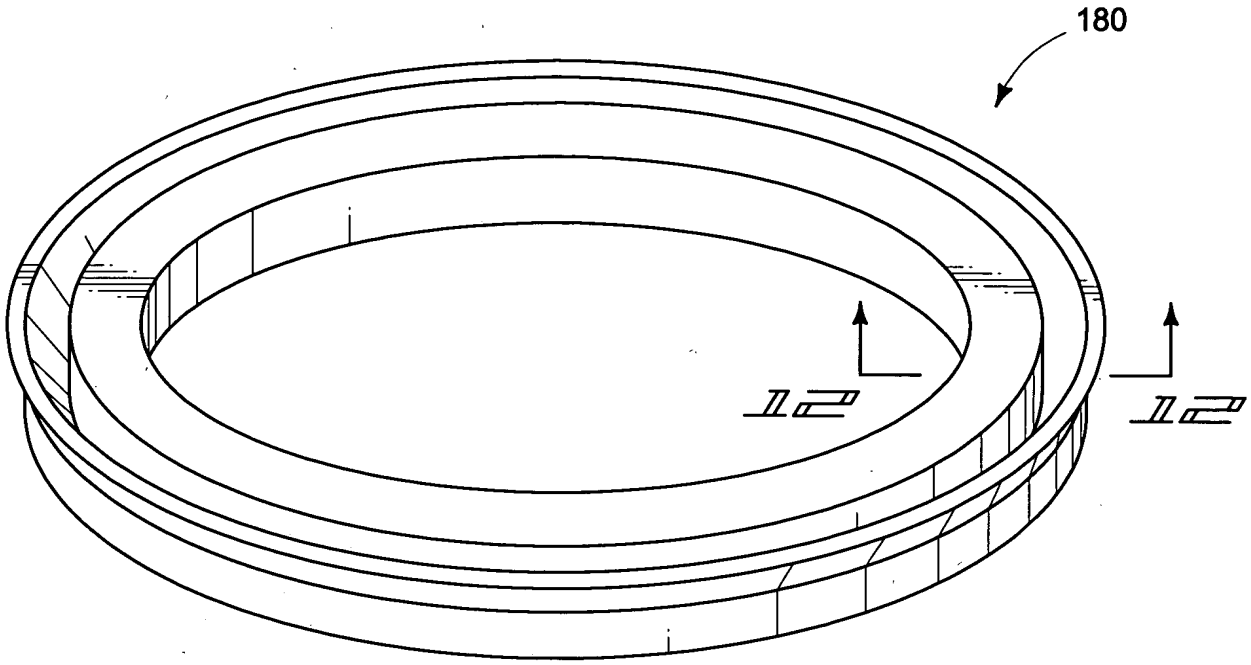



Fig 11

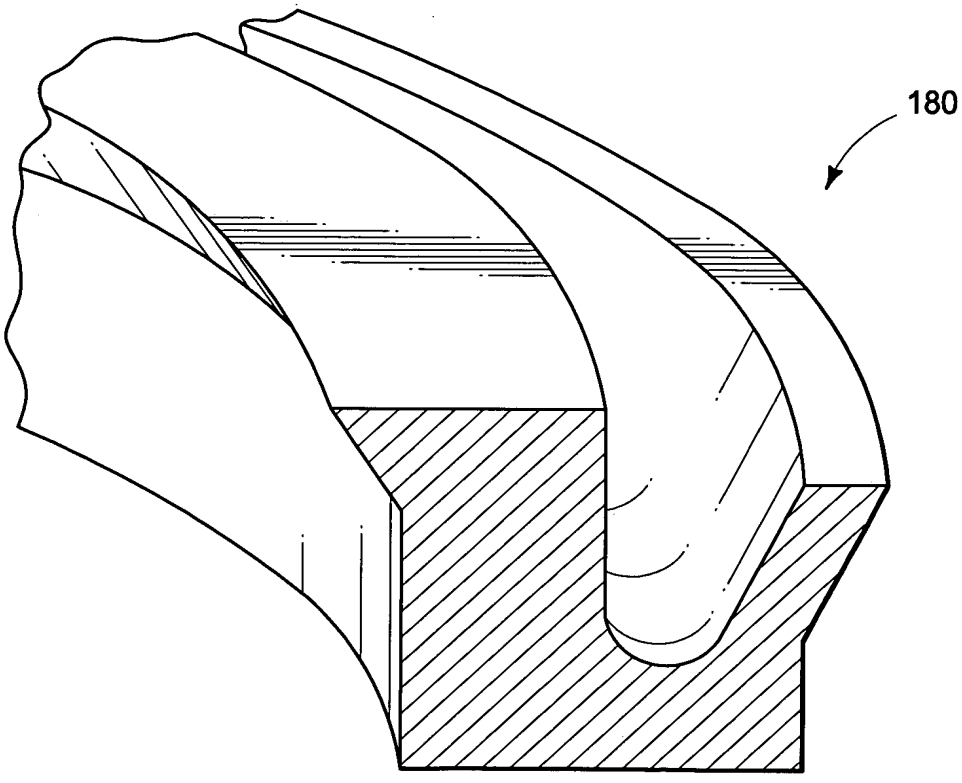
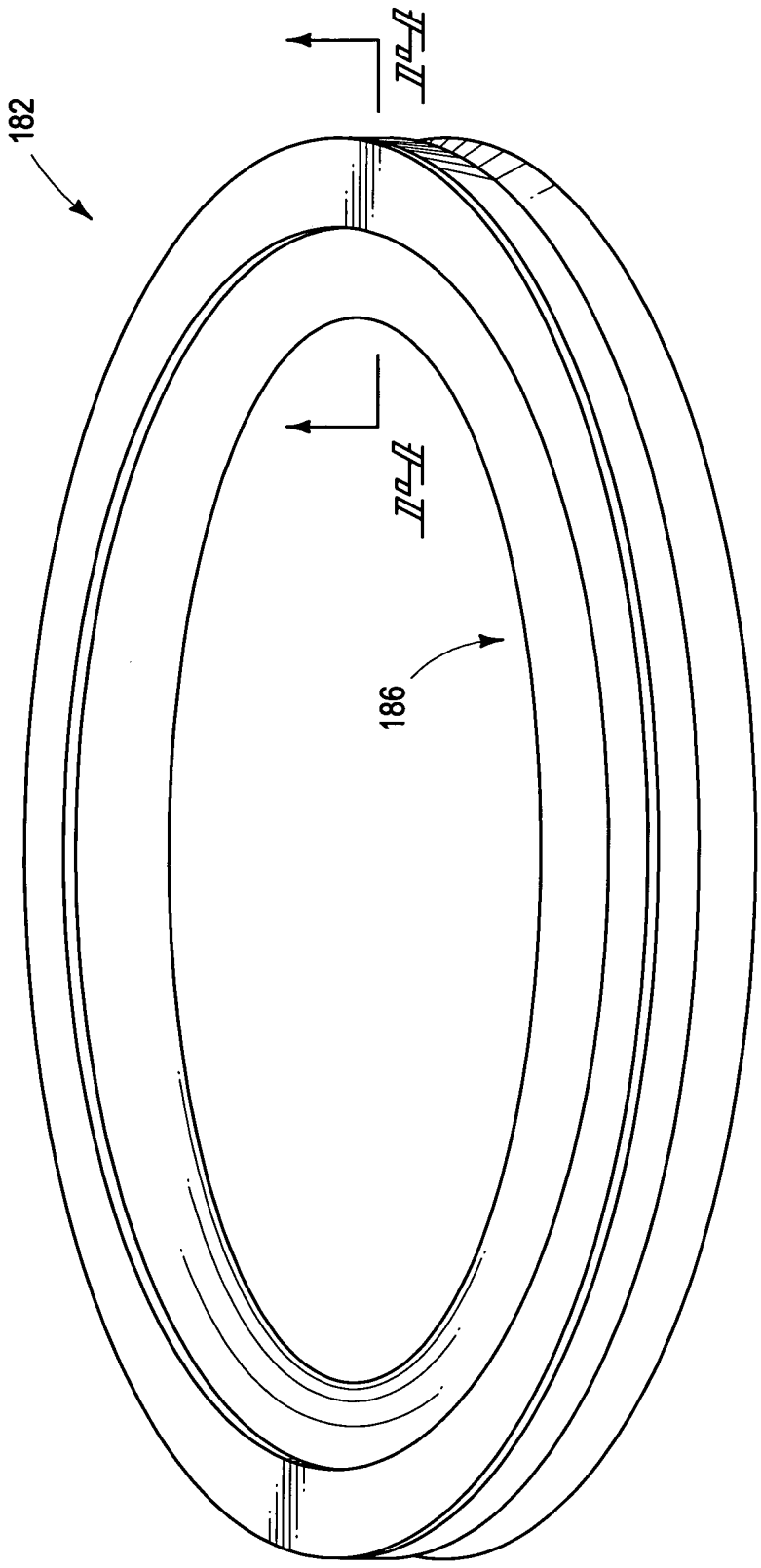



Fig 12


182
FIG 11
186
FIG 11

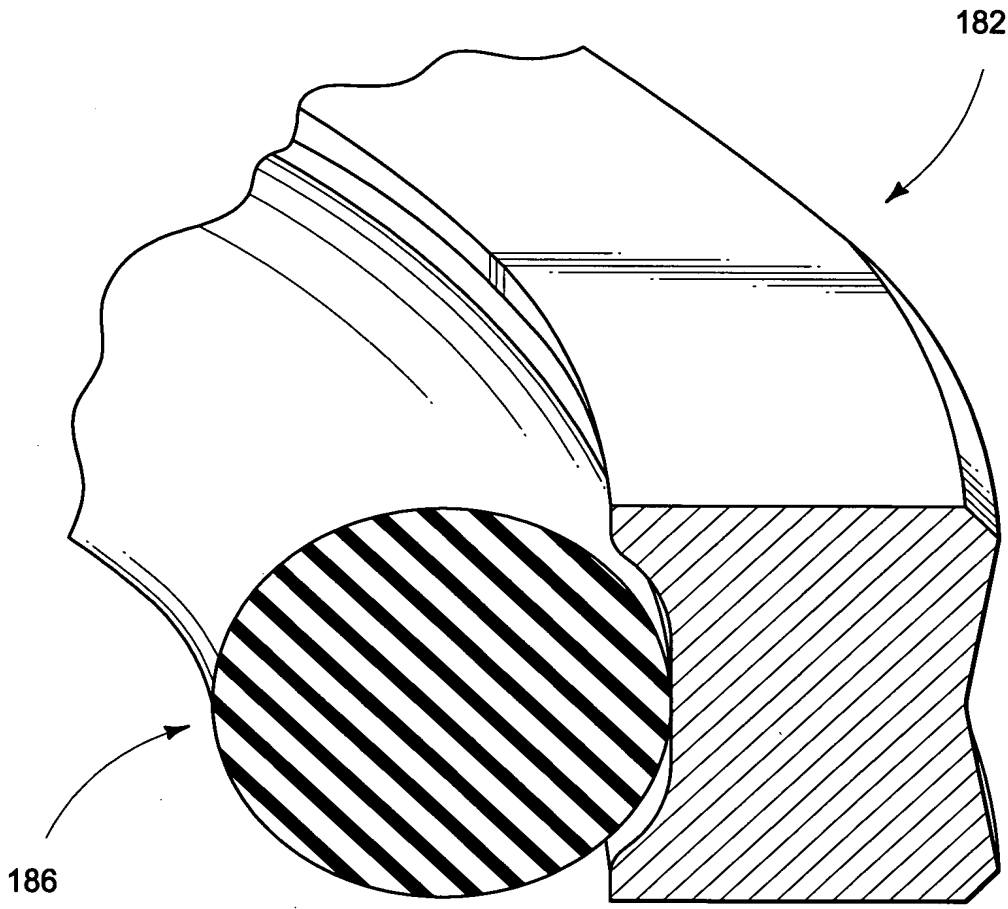



Fig 14

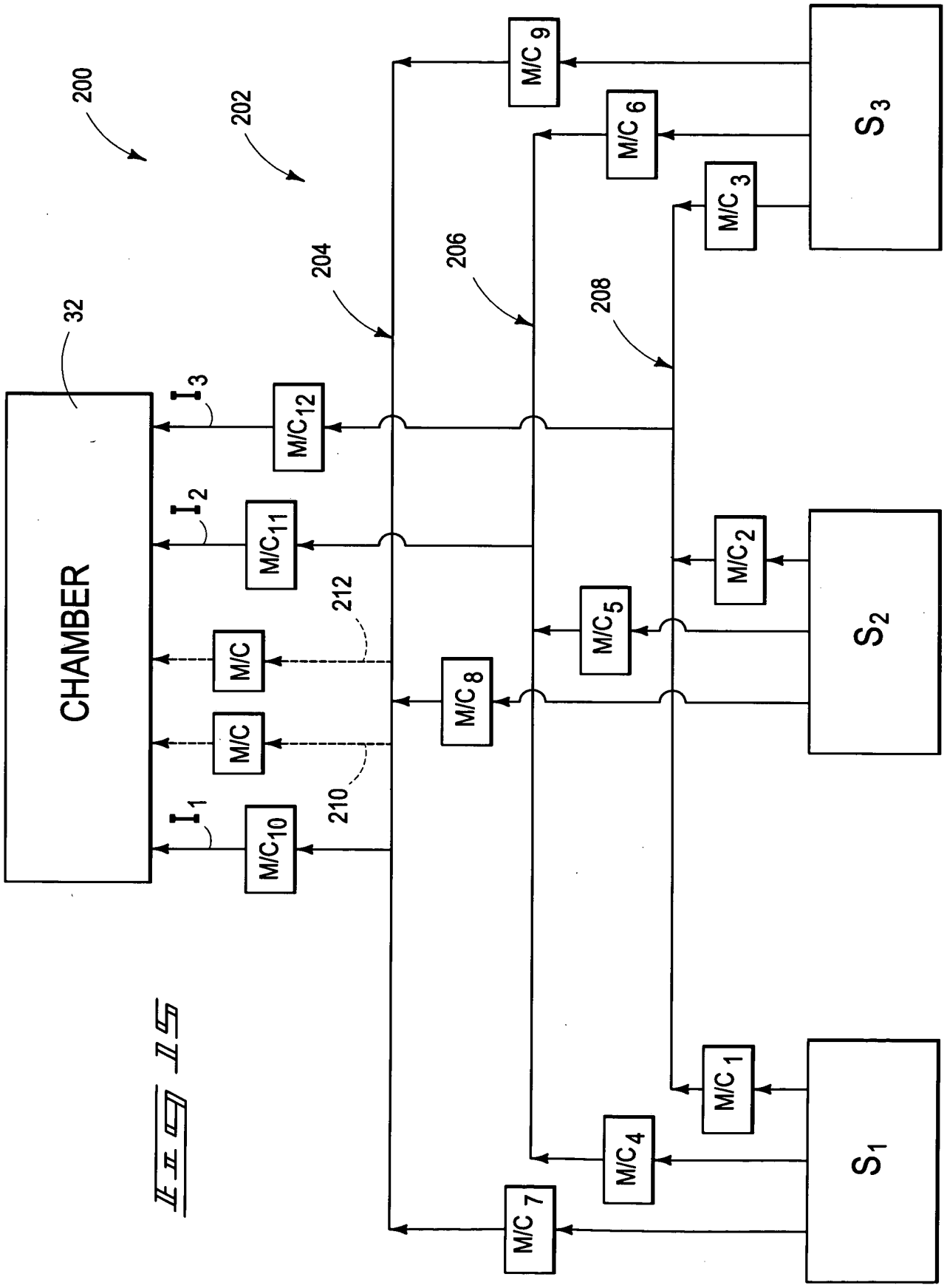

200
202
204
206
208
32
CHAMBER
$I_3$
$I_2$
$I_1$
M/C$_{12}$
M/C$_{11}$
M/C$_{10}$
M/C
M/C
212
210
M/C$_9$
M/C$_6$
M/C$_3$
M/C$_8$
M/C$_5$
M/C$_2$
M/C$_7$
M/C$_4$
M/C$_1$
$S_3$
$S_2$
$S_1$

Fig 15

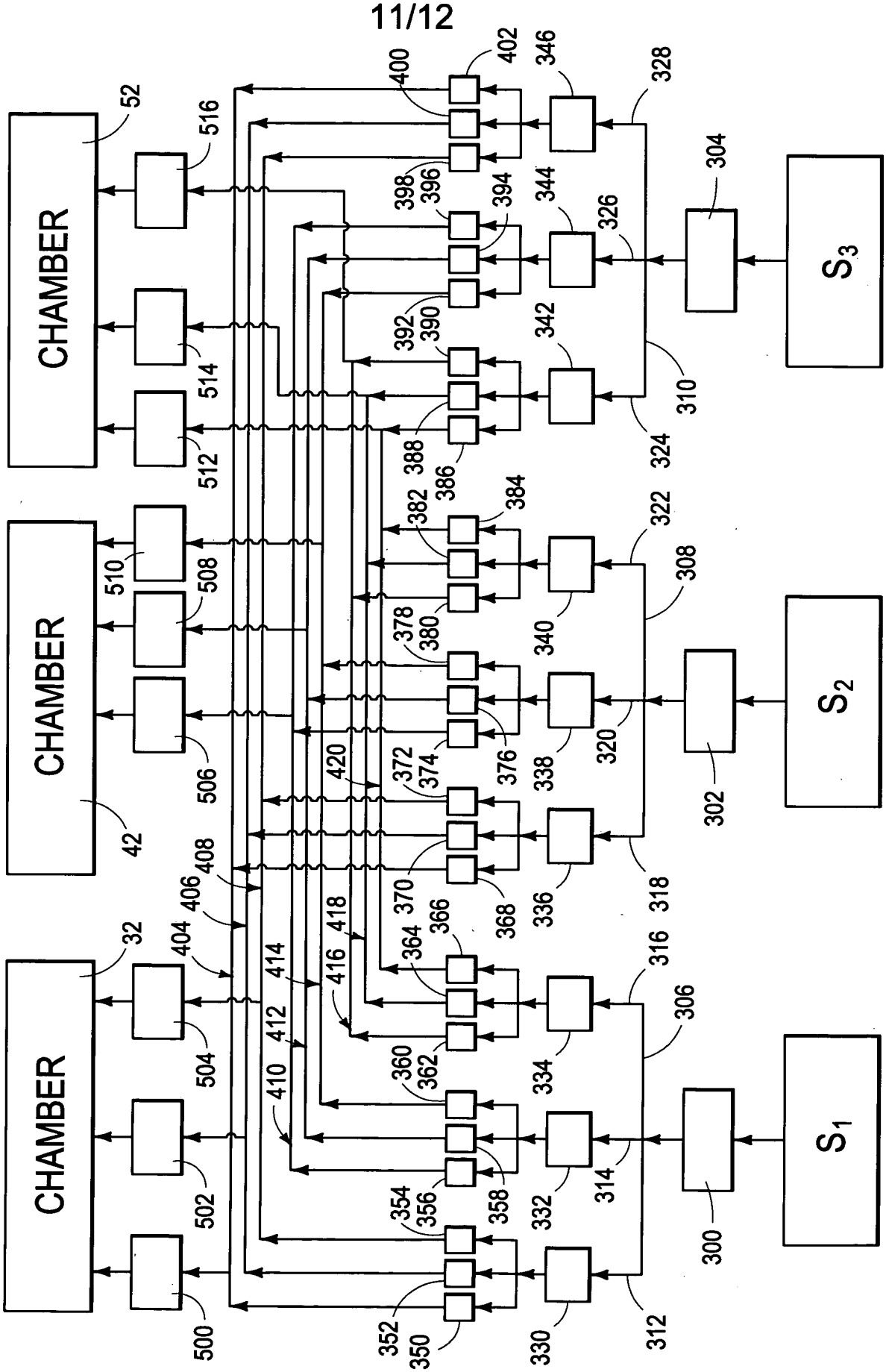



Fig 11B

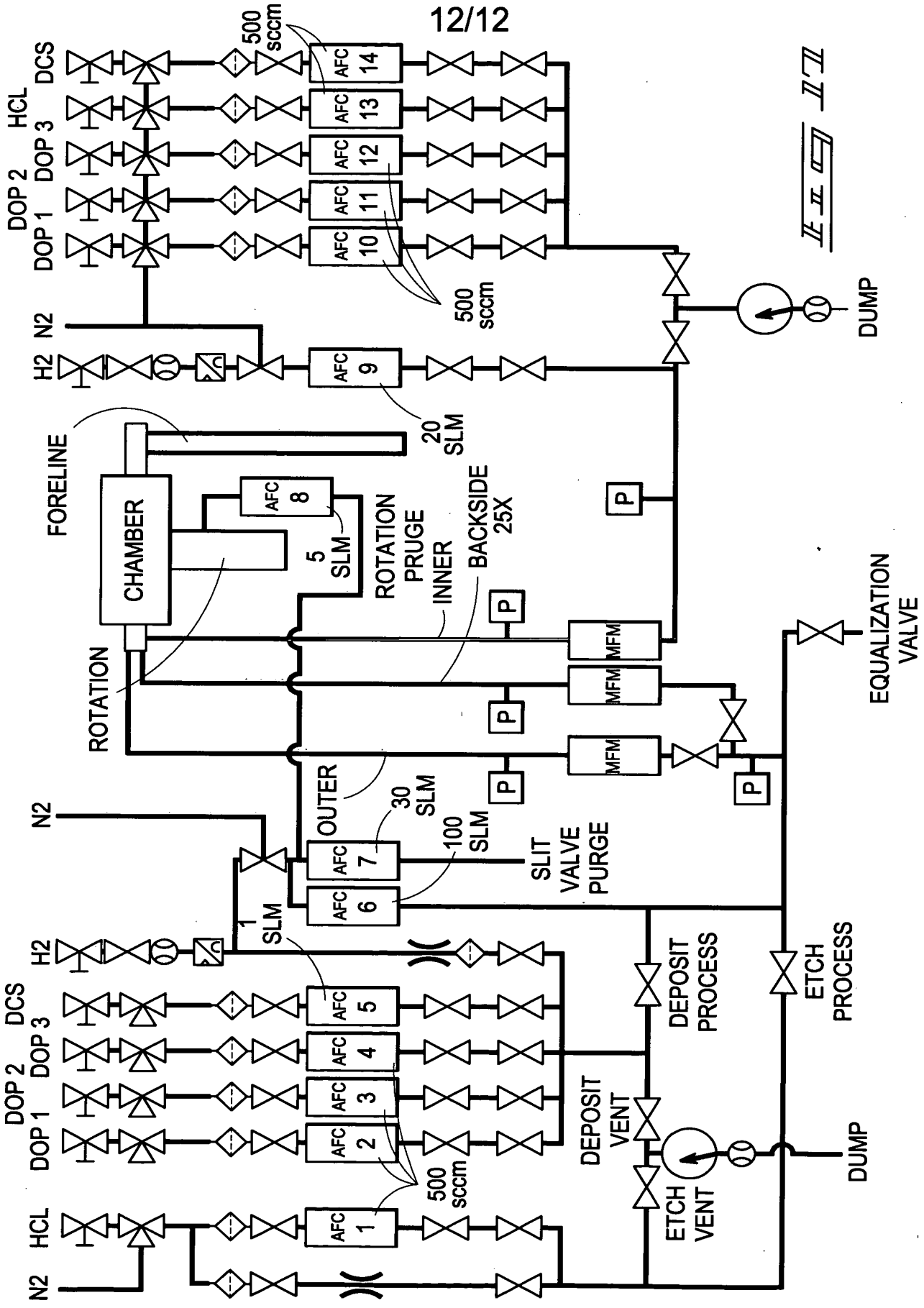


FIG. 11
N2
HCL
DOP 1
DOP 2
DOP 3
DCS
H2
AFC 1
AFC 2
AFC 3
AFC 4
AFC 5
AFC 6
AFC 7
AFC 8
AFC 9
AFC 10
AFC 11
AFC 12
AFC 13
AFC 14
500 sccm
1 SLM
30 SLM
100 SLM
20 SLM
5 SLM
CHAMBER
FORELINE
ROTATION
OUTER
INNER
ROTATION PRUGE
BACKSIDE 25X
SLIT VALVE PURGE
MFM
P
DEPOSIT PROCESS
ETCH PROCESS
DEPOSIT VENT
ETCH VENT
DUMP
EQUALIZATION VALVE